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(54) Title: WATER-RESISTANT GYPSUM FORMULATIONS

(57) Abstract: Emulsion are provided which are useful in imparting water resistance to gypsum products. In one embodiment, the emulsion comprise a plurality of waxes, at least one saponified wax, a complexed starch, a polymerized alkyl phenol, and a small amount of a co-surfactant. In another embodiment, the emulsion comprise a single wax, a balanced dual surfactant system, a complexed starch and a polymerized alkyl phenol. Emulsion of this embodiment may be added to hot, even boiling, water without the emulsion separating or curdling. The emulsion of the present invention are stable for extended periods of time when stored at room temperature and do not require the addition of a bactericide. The emulsion of the present invention are pourable liquids at room temperature.

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